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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,292	09/26/2003	Hisao M. Chang	1033-T00537	8322
34456	7590	07/28/2005	EXAMINER	
TOLER & LARSON & ABEL L.L.P. 5000 PLAZA ON THE LAKE STE 265 AUSTIN, TX 78746			ESCALANTE, OVIDIO	
			ART UNIT	PAPER NUMBER
			2645	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/672,292

Applicant(s)

CHANG, HISAO M.

Examiner

Ovidio Escalante

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 and 27-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is in response to applicant's amendment filed on May 9, 2005. **Claims 1-25,27-37** are now pending in the present application.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-8,10-12,15-22,26,28,34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dhir et al. US Patent 6,553,113 in view of Ball et al. 6,600,736.

**Regarding claim 1**, Dhir teaches a call routing system (abstract) comprising:

a voice converted data module (central server 100) having an input to receive an incoming call, (col. 4, lines 48-65; fig. 1);

an interactive voice response dialog module (IVR System 1, IVR System 2) responsive to the voice converted data module, (col. 4, lines 48-65; col. 5, lines 51-col. 6, line 3; col. 7, lines 52-67; fig. 1); and

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a call routing module responsive to the voice converted data module to route the incoming call to a destination, (col. 5, lines 40-50; col. 8, lines 1-15; fig. 1).

Dhir does not specifically teach the voice converted data module responsive to an interactive voice response unit or an Internet based communication device.

In the same field of endeavor, Ball teaches of a voice converted data module (205) having an input to receive an incoming call, (col. 5, lines 60-65), the voice converted data module responsive to an interactive voice response unit or an Internet based communication device, (col. 7, lines 11-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dhir by having a voice converted data module responsive to an IVR unit as taught by Ball so that the IVR can instruct the module to route the call to the proper destination if the IVR was not able to fully meet the needs of the caller.

**Regarding claim 2**, Dhir, as applied to claim 1, teaches an application server (administrative controller system 115) coupled to the voice converted data module, the interactive voice response dialog module, and the call routing module, the application server having access to a business logic database, (call router database 105), (col. 5, lines 31-39).

**Regarding claim 3**, Dhir, as applied to claim 2, teaches destination rules stored in an interactive voice response database, the destination rules accessible by the routing engine, (col. 8, lines 1-15).

**Regarding claim 4**, Dhir, as applied to claim 2, teaches wherein the business logic database includes call treatment rules based upon at least one of a customer type, time of day,

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type of service, type of call, size of customer, and personalized caller information, (col. 7, lines 15-33; col. 8, lines 1-15).

**Regarding claim 5**, Dhir, as applied to claim 4, teaches wherein the call routing module routes calls using a routing priority based upon the call treatment rules, (col. 8, lines 1-15).

**Regarding claim 6**, Dhir, as applied to claim 2, teaches wherein the business logic database includes call treatment rules that are customized for a single enterprise, (col. 8, lines 1-15).

**Regarding claim 7**, Dhir, as applied to claim 2, teaches a distributed computer network interface to the call routing module, (fig. 1; col. 4, lines 40-48).

**Regarding claim 8**, Dhir, as applied to claim 7, teaches wherein the distributed computer network interface provides access to a customer database, (fig. 1).

**Regarding claim 10**, Dhir, as applied to claim 1, teaches a personalized call queue for temporarily holding calls to be routed, (abstract; fig. 5; col. 10, lines 19-34).

**Regarding claim 11**, Dhir, as applied to claim 10, teaches an audio library stored in a computer memory, at least one audio recording from the audio library available to played to callers in the personalized call queue, (col. 7, lines 62-67; col. 9, line 59-col. 10, line 16; the prompts of Dhir are audio recordings that inherently stored in a prompt library).

**Regarding claim 12**, Dhir, as applied to claim 1, teaches a plurality of automated call response destinations, (col. 11, line 62-col. 12, line 18).

**Regarding claim 15**, Dhir, as applied to claim 1, teaches wherein the voice converted data module is responsive to a directory number rule table stored in a computer memory, (col. 7, lines 34-51).

**Regarding claim 16**, Dhir, as applied to claim 15, teaches wherein the directory number rule table includes validated directory numbers that may be used to validate incoming calls, (col. 7, lines 34-51; col. 9, lines 36-50).

**Regarding claim 17**, Dhir, as applied to claim 1, teaches comprising a computer telephony interface responsive to the interactive voice response dialog module, (col. 6, lines 12--23).

**Regarding claim 18**, Dhir, as applied to claim 17, teaches wherein the computer telephony interface is coupled to a call center agent terminal, (col. 8, lines 40-58).

**Regarding claim 19**, Dhir, as applied to claim 18, teaches wherein a screen display is launched at the call center agent terminal based on a command from the computer telephony interface, (col. 8, lines 53-58).

**Regarding claim 20**, Dhir, applied to claim 19, teaches wherein the screen display is a screen pop that includes session specific information collected from the caller's telephone number and wherein the screen display includes information gathered from a customer relationship manager database, (col. 8, line 63-col. 9, line 12)

**Regarding claim 21**, Dhir, as applied to claim 17, teaches wherein the computer telephony interface retrieves a call profile from a customer relationship management database, (col. 9, lines 7-12).

**Regarding claim 22**, Dhir, as applied to claim 21, teaches wherein an audio file is retrieved and played to the caller based on the call profile, (col. 9, line 59-col. 10, line 16).

**Regarding claim 26**, Dhir, as applied to claim 1, teaches wherein the incoming call is received from an Internet based communication device, (col. 5, lines 6-19).

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**Regarding claim 28**, Dhir, as applied to claim 1 does not teach wherein the incoming call is initially received at the interactive voice response unit and is routed from the interactive voice response unit to a second interactive voice response unit.

In the same field of endeavor, Ball teaches wherein the incoming call is initially received at the interactive voice response unit and is routed from the interactive voice response unit to a second interactive voice response unit, (col. 7, lines 11-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dhir by having a voice converted data module responsive to an IVR unit as taught by Ball so that the IVR can instruct the module to route the call to the proper destination if the IVR was not able to fully meet the needs of the caller.

**Regarding claim 34**, Dhir, as applied to claim 21, teaches wherein the call profile includes control codes provided by the interactive voice response unit, (col. 2, lines 3-17; col. 8, lines 10-25).

**Regarding claim 35**, Dhir, as applied to claim 34, teaches wherein the control codes include a caller language selection code, (col. 2, lines 3-17; col. 8, lines 10-25).

5. Claims 29 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Ball et al. US Patent 6,600,736 in view of Margolis US Patent Pub. 2003/0235287.

**Regarding claim 29**, Ball teaches a method of communicating with an originator of a call, (col. 5, line 60-col. 6, line 13), the method comprising:

receiving a call at a first interactive voice response unit, (col. 5, line 65-col. 6, line 6);

performing an evaluation of the call based on a set of business rules, (col. 7, lines 11-17);

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routing the call from the first interactive voice response unit to a second interactive voice response unit based on the evaluation, (col. 7, lines 11-53).

Ball does not specifically teaches automatically scheduling and send an email to the originator of the call.

In the same field of endeavor, Margolis teaches in response to the call, automatically scheduling and sending an email to the originator of the call, the email including a targeted communication message relating to the subject matter of the call, (paragraphs 0023 and 0031).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ball by automatically scheduling to send an email to the originator as taught by Margolis so that the user can receive pertinent/ supplemental information that was based on their requested information.

**Regarding claim 30**, Ball in view of Margolis, as applied to claim 29, teaches wherein the subject matter of the call includes a customer request and wherein the email includes information responsive to the customer request, (paragraph 0031, Margolis). As stated above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ball by automatically scheduling to send an email to the originator as taught by Margolis so that the user can receive pertinent/ supplemental information that was based on their requested information.

6. Claims 9, 23-25, 27, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dhir in view of Ball and further in view of Margolis US Patent Pub. 2003/0235287.

**Regarding claims 9, 36 and 37**, Dhir in view of Ball, as applied to claim 8, teaches wherein the distributed computer network interface is coupled to a computer network, wherein



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the computer network is the Internet. Dhir in view of Ball do not specifically teach the computer network is configured to communicate e-mail messages in response to the call routing module.

In the same field of endeavor, Margolis teaches wherein a computer network is configured to communicate electronic mail messages in response to a call routing module, and compose a text message associated with a call session (paragraphs 0031 and 0034).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the call routing module message of Dhir and Ball to include e-mail messages as taught by Margolis so that the caller have a choice on how they want to receive their message.

***Regarding claims 23 and 24***, Dhir in view of Ball, as applied to claim 22, teaches everything as applied above, except wherein the audio file includes product information based upon the call profile.

In the same field of endeavor, Margolis teaches wherein an audio file includes product information targeted based upon the call profile and wherein the product information is derived from a product promotion and wherein the product information is targeted based on demographic information included in the call profile, (paragraph 0034).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the audio file of Dhir and Ball to include product information as taught by Margolis so that the call center does not lose contact with the caller and so that the call center can have an effective tool for prompting business.

***Regarding claims 25 and 27***, Dhir in view of Ball, as applied to claim 1, do not specifically teach of using voiceXML or wherein the communication device is a SIP phone.

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In the same field of endeavor, Margolis teaches wherein the voice converted data module is implemented using voiceXML and wherein the Internet based communication device is a SIP phone, (paragraph 0029).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify communication device of Dhir and Ball to include an SIP phone as taught by Margolis so that the user can communicate over the Internet with their phone.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dhir in view of Ball and further in view of Bushey et al. US Patent Pub. 2003/0026409.

**Regarding claim 13**, Dhir in view of Ball, as applied to claim 12, teaches everything except that the plurality of automated call response destinations includes a billing, repair and a bill collection destination.

In the same field of endeavor, Bushey teaches wherein a plurality of automated call response destinations includes a billing destination, a repair destination, and a bill collection destination, (paragraphs 0031).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the automated call response options of Dhir and Ball to include billing and repair options as taught by Bushey so that callers can navigate through business centric menus.

**Regarding claim 14**, Dhir, as applied to claim 13, teaches wherein a call routed to at least one of the plurality of automated call response destinations is connected to an agent terminal such that the call is routed to a live agent at the call agent terminal, (col. 8, lines 28-39; col. 9, lines 1-12).

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8. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dhir in view of Ball and further in view of Knott et al. US Patent Pub. 2004/0174980.

*Regarding claims 31-33*, Dhir, as applied to claim 18, does not specifically teach of playing a chained message associated with a task at the call center agent terminal.

In the same field of endeavor, Knott teaches wherein the computer telephony agent plays a chained message associated with a task at the call center agent terminal, (paragraph 0038); wherein the chained message is based on a voice recording of a caller, (paragraph 0038); and wherein the chained message is based on a text-to-speech generated audio message, (paragraphs 0012 and 0038).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dhir in view of Ball by using chained messages so that the agent can receive information about the caller without the caller hearing what is being sent.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-25 and 27-37 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any response to this action should be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7537, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is 571-272-7537. The examiner can normally be reached on M-Th from 6:30AM to 4:00PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**OVIDIO ESCALANTE**  
**PATENT EXAMINER**

*Ovidio Escalante*

Ovidio Escalante  
Examiner  
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July 25, 2005

O.E./oe